

Title (en)  
Wrapping machine

Title (de)  
Banderoliermaschine

Title (fr)  
Banderoler

Publication  
**EP 1439125 A2 20040721 (DE)**

Application  
**EP 03028393 A 20031211**

Priority  
DE 10301347 A 20030116

Abstract (en)

A film changing unit(7) is located on one, preferably both sides of a feeding table(2). Each film changer has a stored(8) and an active(9) film roll. Both the active(3) and stored(22) film strip pass through a film sealing unit(10) with a cutting and welding unit(36,37). On changeover between active and stored films a compressed transverse cut seam is made between the working and the stored films. The film sealing unit(10) comprises three separate components(15,16,17) forming two parallel slits(18,19) and the stored film strip passes through one slit and is partly wrapped around the center component(16). The active film(3) passes vertically through the other slit(19,18). Each cutting and welding unit(36,37) comprises a heating element and an opposing tool separated by the film slits. Clamping strips are located on the opposing tool or on the heating element and a cutting edge is formed on either component. One of the latter components moves relative to the other. When each heating element has a cutting edge these are static and in the center component of the film sealing unit. The cutting edges face the film slits and the opposing tools are in the other two components and have rubber cutting profiles which move towards the center component. A spring plate with openings for film strip clamping is allocated to each heating element and the film strips are clamped between the opposing tool and the plate. The opposing tool comprises a rubber rail and the heating element is impulse heated. A clamp(31), comprising a strip(32) and a spring(33), holds the projecting leader(34) of the stored film(22) against the underside of the central component. A swiveling guide roll moving between two positions ensures that the active film strip always passes along the outer edge(23) of the film slit. Continuous monitoring of a roll thickness is effected by a light sensor which emits a signal to initiate the film clamping stage and/or the heating stage. An Independent claim is included for a process for film roll changeover in which: (i) the stored film strip is guided through a first slit between a first and a central component of the sealing unit(10); (ii) passed around the central component and through a second slit, through which the active strip(3) also passes; (iii) the projecting leader of the stored storage film is clamped(31); (iv) the stored film and adjacent active film strip are parted by the cutting and welding unit which simultaneously welds the rear end of the active film to the stored film and stored film leader to the remaining length of active film strip; (v) the empty active film roll is exchanged for a new, full one.

Abstract (de)

Die Erfindung betrifft eine Banderoliermaschine (1) mit beidseitig eines Zufuhrtisches (2) angeordneten Folienrollen (8, 9), deren Folienbahnen (3) unter Bildung eines, einen Schlitz (5) des Zufuhrtisches (2) durchsetzenden, Folienvorhangs (4) durch eine Siegelnaht miteinander verbunden sind, bei der das zu banderolierende Gut gegen den Folienvorhang (4) geschoben, die Folie dabei zu einer Schlinge um das Gut herumgelegt und die Schlinge mittels einer, mindestens eine der Folienbahnen vorübergehend festklemmenden Straffzieheinrichtung (6) gestrafft und mittels einer Schweißvorrichtung verschweißt und von Folienrest abgetrennt wird. Der Erfindung liegt die Aufgabe zugrunde, eine Banderoliermaschine vorzuschlagen, bei der die Vorratsfolienbahn nicht exakt positioniert werden muß und bei der kein loser Folienabfall entsteht. Diese Aufgabe wird dadurch gelöst, dass zumindest auf einer Zufuhrtischseite, insbesondere auf beiden Zufuhrtischseiten, eine Folienwechseleinheit (7) vorgesehen ist, bestehend aus mindestens einer Vorratsfolienrolle (8) und einer Arbeitsfolienrolle (9), wobei sowohl die Arbeitsfolienbahn (3), als auch die Vorratsfolienbahn (22) durch eine Foliensiegeleinheit (10) geführt ist, wobei die Foliensiegeleinheit (10) mindestens eine Trennschweißeinrichtung (36, 37), zur Herstellung einer Quetschtrennaht zwischen alter Arbeitsfolienbahn und Vorratsfolienbahn sowie zwischen Vorratsfolienbahnüberstand (34) und dem Rest der alten Arbeitsfolienbahn in einem Arbeitsgang, aufweist. <IMAGE>

IPC 1-7  
**B65B 9/02**

IPC 8 full level  
**B65B 9/02** (2006.01); **B65H 19/18** (2006.01); **B65H 19/20** (2006.01)

CPC (source: EP US)  
**B65B 9/026** (2013.01 - EP US); **B65H 19/1852** (2013.01 - EP US); **B65H 19/1873** (2013.01 - EP US); **B65H 19/20** (2013.01 - EP US); **B65H 2301/4621** (2013.01 - EP US); **B65H 2301/4634** (2013.01 - EP US); **B65H 2511/14** (2013.01 - EP US); **B65H 2701/1752** (2013.01 - EP US); **Y10T 156/1054** (2015.01 - EP US)

Cited by  
US7201952B2; CN109368335A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2004140044 A1 20040722**; **US 7147737 B2 20061212**; AT E382546 T1 20080115; DE 10301347 A1 20040226; DE 10301347 B4 20130508; DE 50308909 D1 20080214; EP 1439125 A2 20040721; EP 1439125 A3 20060322; EP 1439125 B1 20080102; ES 2297091 T3 20080501

DOCDB simple family (application)  
**US 74601603 A 20031223**; AT 03028393 T 20031211; DE 10301347 A 20030116; DE 50308909 T 20031211; EP 03028393 A 20031211; ES 03028393 T 20031211